

# A STUDY OF CORRELATION BETWEEN FOOT ARCH AND SKILL PERFORMANCE OF FOOTBALL PLAYERS

### Dr. Chander Shekhar

Assistant Professor, SGGS Khalsa College, Mahilpur, India.

### **ABSTRACT**

The purpose of the study was to analysis the co-relation between foot arch and skill performance of football players. The 50 subjects were randomly selected from Degree College of physical education Amravati Maharashtra. Protector or scale was used to measure the foot arch angle and foot arch height. Beside that Juggling skill of football was used to collect the data for find out the co-relation between foot arch and skill performance of football players. For the optioning correlation between foot arch with sports performance following statistics were used Rank – Difference, Co-relation, Co-efficient. The results were shown that performance of skill the relation between angle of foot arch and performance is found correlated. Besides that low foot arch performance was negative correlated medium angle arch is correlated and high angle arch performance is not found correlated. The high height of foot arch was found correlated with performance. Low height arch is not found correlated with performance as compare to high height foot arch and middle height arch performance not correlated with high height arch.

**KEYWORDS:** Correlation, Foot arch and skill performance.

#### INTRODUCTION:

Today, modern men live in predominantly urbanized and technologically developed society. Having in mind our biological background that adapted us to more active life style (hunting, food search and other needs) we should, for our own good, influence our modern lifestyle (Ilić, 2006).

Medical check-ups indicate that, besides bad posture, an increasing number of children suffer from body deformities as well as functional disabilities of locomotors system based on certain diseases (Radisavljević, 2001).

Understanding this, it is clear that physical exercises, when adequately implemented, together with all precautions, can be one of the most efficient and most useful measures to correct such states. Thus, physical exercises should be understood as basic means of kinesitherapy and therefore, of corrective gymnastics as its integral part (Koturović & Jeričević, 1996).

Sports games are one of more successful methods of corrective gymnastics. They are applied in order to undertake precautions to improve physical and functional abilities as well as to undertake measures for complete rehabilitation, i.e. resocialization of those who have already developed disease, defect or deformity (Radisavljević, 2001).

Statistical analyses indicate that most frequent disorders and deformities of locomotors system in schoolchildren refer to different forms and stadiums of fallen arches (Kosinac, 2008).

Incidence of this deformity is caused, or at least contributed by modern way of life. Using transportation means leads to less activities of feet musculature which in children is in development. Therefore, movement is particularly important because it causes progress of muscular quality decrease (Koturović & Jerinčević, 1996).

#### METHODS:

The purpose of study was to determine the correlation between foot arch and skill performances of football players of D.C.P.E Amaravati (Maharastra).

#### Samples

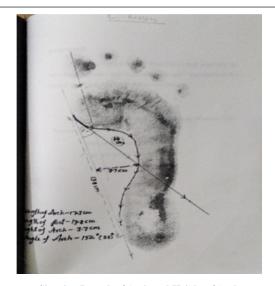
50 subjects were randomly selected from Degree College of physical education of Amaravati.

#### **Tools:**

The following tools used by researcher for data collection.

Angle of Foot-Moon shape D (Protector) = 0 degree

Height of foot arch-Scale = cm.



Showing Length of Arch and Height of Arch



**During the Data Collection** 

### Procedure of data collection:

- The angle of foot arch and height of arch was measured with geometric D (Protector).
- 2. Skill performance was measured by Juggling skill in a circle with radius 2.74 mtr marked by researcher for data collection.
- 3. Three trails were given to each subject.
- 4. Each trail given for 45 second, and 1 minute for rest between two trails.

#### Scoring:

Each touch counted as score in 45 seconds. Three trails were given for total scoring.

#### ANALYSIS:

Under this mention the analysis of data.

Table: 1 shows that the category of different angles of foot arch.

Group	Category	No of Players
High Angle	30 degree and below 30 degree	13
Medium Angle	Between 31 to 39 degree	24
Low Angle	40 and more then 40 degree	13

Table: 2 show that the category of different height of foot arch.

Group	Category	No of Players
High Height	3 cm and below 3 cm	06
Medium Height	Between 3.1 to 4 cm	27
Low Height	more then 4 cm	17

For the optioning correlation between foot arch with sports performance following statistics were used Rank – Difference, Co-relation, Co-efficient.

Table: 3

S. No	Performance	Foot Arch	Co-relation Co-efficient
1	Juggling Performance	Angle of Foot Arch	0.846*
2	Juggling Performance	Medium Angle of Foot Arch	0.502*
3	Juggling Performance	Low Angle	-0.47*
4	Juggling Performance	High Angle	0.116
5	Juggling Performance	Height of Foot Arch	0.46*
6	Juggling Performance	High Height	0.07
7	Juggling Performance	Medium Height	0.423*
8	Juggling Performance	Low Height	0.272

#### RESULTS:

Table shows that performance of skill the relation between angle of foot arch and performance is found correlated (0.846). Besides that low foot arch performance was negative correlated (0.502), medium angle arch is correlated (0.502) and high angle arch performance is not found correlated (0.116).

The high height of foot arch was found correlated with performance. Low height arch is not found correlated with performance as compare to high height foot arch (0.272) and middle height arch performance not correlated with high height arch (0.07).

## REFERENCES:

- $1. \hspace{0.5cm} Ili\'e, N. \, (2006). \ Fiziologija \ sporta \ Physiology \ of \ Sport. \ Belgrade; Serbia: SIA.$
- Kosinac, Z. (2008). Kineziterapija sustava za kretanje Kinesitherapy of the locomotor system. Zagreb, Croatia: Gopal.
- Koturović, LJ., & Jeričević, D. (1996). Korektivna gimnastika Corrective gymnastics. Belgrade; Serbia: IGP "MIS SPORT".
- Radisavljević, M. (2001). Korektivna gimnastika sa osnovama kineziterapije Corrective gymnastics and elements of kinesitherapy. Belgrade, Serbia: Advanced school for sports coaches.